

Message

---

**From:** Schmidtke, Klaus [Klaus.Schmidtke@ghd.com]  
**Sent:** 3/14/2017 3:37:07 PM  
**To:** Negrelli, Mike [Negrelli.Mike@epa.gov]; Alvey, Robert [Alvey.Robert@epa.gov]; Scharf, Steven (DEC) (steven.scharf@dec.ny.gov) [steven.scharf@dec.ny.gov]  
**CC:** Roger\_Smith@oxy.com; Project Email Filing [Filing-NA@ghd.com]  
**Subject:** RE: Hooker Ruco, Request to Modify Biosparge Performance Monitoring ~COR-006883~

Please see clarification in red below.

---

**From:** Schmidtke, Klaus  
**Sent:** Tuesday, March 14, 2017 10:59 AM  
**To:** Negrelli, Mike (Negrelli.Mike@epa.gov); Alvey, Robert@epa.gov; Scharf, Steven (DEC) (steven.scharf@dec.ny.gov)  
**Cc:** Roger\_Smith@oxy.com; 'cctofiging@craworld.com'  
**Subject:** FW: Hooker Ruco, Request to Modify Biosparge Performance Monitoring ~COR-006883~

Mike

Thanks for agreeing to sample wells MW-76I and MW-85I annually.

With regard to the comment regarding the 5 ug/L detection limit (DL) for PCE and TCE, the lab will report both those compounds with a DL of 1 ug/L going forward.

However, it is noted that even though the current detection limit is 5 ug/L, the lab already reports estimated values down to less than 1 ug/L (e.g., PCE of 0.85I ug/L in the MW-73D1 7/18/2014 sample and TCE of 0.92I ug/L in the MW-70D1 10/23/2014 sample).

Regards,

**Klaus Schmidtke Ph.D., P. Eng.**

**GHD**

T: 1 519 884 0510 | F: 1 519 884 0525 | Email: [klaus.schmidtke@ghd.com](mailto:klaus.schmidtke@ghd.com) | [www.ghd.com](http://www.ghd.com)  
Mailing address: 651 Colby Drive Waterloo Ontario N2V 1C2 Canada  
Office address: 140 Bathurst Drive Waterloo Ontario N2V 1V7 Canada

[WATER](#) | [ENERGY & RESOURCES](#) | [ENVIRONMENT](#) | [PROPERTY & BUILDINGS](#) | [TRANSPORTATION](#)

Please consider our environment before printing this email

---

**From:** Negrelli, Mike [<mailto:Negrelli.Mike@epa.gov>]  
**Sent:** Wednesday, March 08, 2017 3:23 PM  
**To:** Schmidtke, Klaus  
**Cc:** Alvey, Robert; Scharf, Steven (DEC)  
**Subject:** FW: Hooker Ruco, Request to Modify Biosparge Performance Monitoring

Klaus-

Here is a follow-up from our talk this morning. Essentially Rob is pointing out that 76-I and 85-I are producing borderline results for PCE and TCE at about 5 ppb, which is the MCL. We are uncomfortable with 5 ppb being what appears to be the detection limit – the lab should calibrate for a detection limit lower than the MCL. There are also not many wells being sampled in the I zone so taking these two wells out of the sample set makes for an even smaller sample size. Therefore we

would like MW-76I and 85I to be continued to be sampled although the frequency can be reduced to annual rather than biannual sampling.

Let me know if you would like to discuss this further.

---

**From:** Alvey, Robert

**Sent:** Wednesday, March 08, 2017 1:32 PM

**To:** Negrelli, Mike <[Negrelli.Mike@epa.gov](mailto:Negrelli.Mike@epa.gov)>

**Cc:** Metz, Chloe <[Metz.Chloe@epa.gov](mailto:Metz.Chloe@epa.gov)>

**Subject:** RE: Hooker Ruco, Request to Modify Biosparge Performance Monitoring

Hi Mike,

The tables in the Jan 16 letter has a number of lab qualifiers that make it difficult to interpret with certainty. For example, the 10/20/2016 results for MW-76I report PCE at 5.0UJ, TCE at 5.0U and VC at 2.0UJ. Sort of seems to be stating that they only estimate undetected at that level while you reference in the 1 ppb range. Marian suggested they should stipulate lab detection at a lower level.

There are only a few locations where they sample in the S and I zones. I assume they are comfortable there is nothing coming onto the "property" from those zones whether its VC, TCE or PCE. I'd prefer to keep MW- 76I and MW-85I in the sampling loop, but can be reduced to annual frequency like a few of the others.

We've gone through the "upwelling" issue in the past and have a basic disagreement not on the upwelling itself, but that there may have also been a lateral displacement of contaminants. I'm in general agreement that the potential for uplift is no longer a concern.

Glad they are doing voluntary sampling of MW-58D1 (TCE 4400 ug/l Oct 2016)) and MW-58D2 (TCE 3200 ug/l Oct 2016) MW58-D2 seems to have dropped from 7600 ug/l in May 2016. Presumably water from this location is flowing towards the new Well- 3R Northrop Grumman installed after Well GP 3 failed. Their table only notes sampling of MW-3-1 is conducted and reported by Northrop. The last sample date on the figure indicates 11/15. Lorenzo Thantu is the new EPA RPM for the Northrop-Grumman/Navy Bethpage site. Would you like me to check if they have more recent sampling results?

Let me know.

Regards  
Rob Alvey

---

**From:** Negrelli, Mike

**Sent:** Wednesday, March 08, 2017 9:28 AM

**To:** Alvey, Robert <[Alvey.Robert@epa.gov](mailto:Alvey.Robert@epa.gov)>

**Subject:** RE: Hooker Ruco, Request to Modify Biosparge Performance Monitoring

Hi Rob-

Klaus Schmidtke and I talked a short while ago. He wanted me to consider that MW-85 and MW-76 were installed for the purpose of monitoring for VCM upwelling and the idea behind taking the shallow and intermediate nests out of the sampling program is because they have demonstrated that the upwelling is not occurring. He further wanted to point out that TCE and PCE sampling from the intermediate nest of each well is consistently ND or in the 1 ppb range. He also said that the "D" nest will continue to be sampled for all VOCs so these wells are not going to be decommissioned and the

deep nest will continue to be sampled for VOCs. So based on this argument, would you agree that MW-85 and MW-76 S&I can be dropped from the sampling program?

---

**From:** Alvey, Robert  
**Sent:** Friday, March 03, 2017 4:23 PM  
**To:** Negrelli, Mike <Negrelli.Mike@epa.gov>  
**Subject:** RE: Hooker Ruco, Request to Modify Biosparge Performance Monitoring

Thanks Mike,  
Works for me.  
Have a good weekend!  
Rob

---

**From:** Negrelli, Mike  
**Sent:** Friday, March 03, 2017 4:20 PM  
**To:** Schmidtke, Klaus <Klaus.Schmidtke@ghd.com>  
**Cc:** Kay, Jim <Jim.Kay@ghd.com>; Roger Smith@oxy.com; Alvey, Robert <Alvey.Robert@epa.gov>; Scharf, Steven (DEC) <steven.scharf@dec.ny.gov>  
**Subject:** RE: Hooker Ruco, Request to Modify Biosparge Performance Monitoring

Klaus-

I have reviewed the proposed changes to the Hooker Ruco Biosparge System Performance Monitoring Program put forth in Roger Smith's letter to me dated January 16, 2017. The proposed changes to the program include discontinuing the sampling and analysis requirements for VCM from well nests MW-76S&I and MW-85S&I and to reduce the sampling and analysis frequency for a host of other wells outlined in the letter from semi-annually to annually. The request is made based on performance results since the initiation of the program.

After discussing the proposal with EPA's site hydrogeologist and the New York State Department of Environmental Conservation project manager, we are agreeable to the suspension of VCM monitoring from the shallow nest of MW-76 and MW-85 but would like the program to continue using the intermediate well nest to monitor TCE and PCE contamination. With respect to monitoring frequency, the O&M Plan cites that initial monitoring is to be performed quarterly and following a period of consistent monitoring results, be replaced by semi-annual monitoring. Since the biosparge system is still an active remedial action, and the TCE and PCE contamination continues to require monitoring, monitoring frequency should continue to be performed semi-annually at this time. It should be noted, however, that in accordance with the O&M Plan reporting schedule, monitoring reports may be submitted semi-annually rather than quarterly.

Please let me know if you have any questions or would like to discuss this further.

Mike Negrelli

---

**From:** Schmidtke, Klaus [mailto:Klaus.Schmidtke@ghd.com]  
**Sent:** Thursday, March 02, 2017 11:59 AM  
**To:** Negrelli, Mike <Negrelli.Mike@epa.gov>  
**Cc:** Kay, Jim <Jim.Kay@ghd.com>  
**Subject:** RE: Hooker Ruco, Request to Modify Biosparge Performance Monitoring

Hello Mike

I was wondering if you have been able to review the attached request.  
It would be great if an answer could be provided by early next week so that the arrangements for the sampling to be performed in April can be started.  
As always, contact me or Jim if you have any questions.

Regards,

**Klaus Schmidtke Ph.D., P. Eng.**

**GHD**

T: 1 519 884 0510 | F: 1 519 884 0525 | Email: [klaus.schmidtke@ghd.com](mailto:klaus.schmidtke@ghd.com) | [www.ghd.com](http://www.ghd.com)  
Mailing address: 651 Colby Drive Waterloo Ontario N2V 1C2 Canada  
Office address: 140 Bathurst Drive Waterloo Ontario N2V 1V7 Canada

[WATER](#) | [ENERGY & RESOURCES](#) | [ENVIRONMENT](#) | [PROPERTY & BUILDINGS](#) | [TRANSPORTATION](#)

Please consider our environment before printing this email

---

**From:** Schmidtke, Klaus  
**Sent:** Saturday, February 18, 2017 9:41 AM  
**To:** 'Negrelli, Mike'  
**Subject:** RE: Hooker Ruco

Mike

As requested, attached is the request.

Regards,

**Klaus Schmidtke Ph.D., P. Eng.**

**GHD**

T: 1 519 884 0510 | F: 1 519 884 0525 | Email: [klaus.schmidtke@ghd.com](mailto:klaus.schmidtke@ghd.com) | [www.ghd.com](http://www.ghd.com)  
Mailing address: 651 Colby Drive Waterloo Ontario N2V 1C2 Canada  
Office address: 140 Bathurst Drive Waterloo Ontario N2V 1V7 Canada

[WATER](#) | [ENERGY & RESOURCES](#) | [ENVIRONMENT](#) | [PROPERTY & BUILDINGS](#) | [TRANSPORTATION](#)

Please consider our environment before printing this email

---

**From:** Negrelli, Mike [<mailto:Negrelli.Mike@epa.gov>]  
**Sent:** Monday, February 13, 2017 8:47 AM  
**To:** Schmidtke, Klaus  
**Subject:** RE: Hooker Ruco

OK, no problem. Enjoy your vacation!

---

**From:** Schmidtke, Klaus [<mailto:Klaus.Schmidtke@ghd.com>]  
**Sent:** Sunday, February 12, 2017 9:45 AM  
**To:** Negrelli, Mike <[Negrelli.Mike@epa.gov](mailto:Negrelli.Mike@epa.gov)>  
**Subject:** RE: Hooker Ruco

Mike

I started vacation the morning of February 10 and can not access the folder with the request from my vacation location. I will email the request to you when I return on February 21.

Regards,

**Klaus Schmidtke Ph.D., P. Eng.**

**GHD**

T: 1 519 884 0510 | F: 1 519 884 0525 | Email: [klaus.schmidtke@ghd.com](mailto:klaus.schmidtke@ghd.com) | [www.ghd.com](http://www.ghd.com)  
Mailing address: 651 Colby Drive Waterloo Ontario N2V 1C2 Canada  
Office address: 140 Bathurst Drive Waterloo Ontario N2V 1V7 Canada

WATER | ENERGY & RESOURCES | ENVIRONMENT | PROPERTY & BUILDINGS | TRANSPORTATION

Please consider our environment before printing this email

---

**From:** Negrelli, Mike [<mailto:Negrelli.Mike@epa.gov>]  
**Sent:** Friday, February 10, 2017 10:36 AM  
**To:** Schmidtke, Klaus  
**Cc:** [Roger\\_Smith@oxy.com](mailto:Roger_Smith@oxy.com)  
**Subject:** Hooker Ruco

Hi Klaus-

I picked up your voicemail message this morning. Can you please resend the request you are referring to? I will take a look and get back to you ASAP. Thanks.

---

This e-mail has been scanned for viruses

---

CONFIDENTIALITY NOTICE: This email, including any attachments, is confidential and may be privileged. If you are not the intended recipient please notify the sender immediately, and please delete it; you should not copy it or use it for any purpose or disclose its contents to any other person. GHD and its affiliates reserve the right to monitor and modify all email communications through their networks.

---

This e-mail has been scanned for viruses

---

CONFIDENTIALITY NOTICE: This email, including any attachments, is confidential and may be privileged. If you are not the intended recipient please notify the sender immediately, and please delete it; you should not copy it or use it for any purpose or disclose its contents to any other person. GHD and its affiliates reserve the right to monitor and modify all email communications through their networks.

---

This e-mail has been scanned for viruses

---

CONFIDENTIALITY NOTICE: This email, including any attachments, is confidential and may be privileged. If you are not the intended recipient please notify the sender immediately, and please delete it; you should not copy it or use it for any purpose or disclose its contents to any other person. GHD and its affiliates reserve the

right to monitor and modify all email communications through their networks.

---

This e-mail has been scanned for viruses

---

CONFIDENTIALITY NOTICE: This email, including any attachments, is confidential and may be privileged. If you are not the intended recipient please notify the sender immediately, and please delete it; you should not copy it or use it for any purpose or disclose its contents to any other person. GHD and its affiliates reserve the right to monitor and modify all email communications through their networks.

---